

Amendments to the claims:

The listing of claims will replace all prior versions of the claims in the application

Claims 1 – 18, 20 - 22, 24 – 27, and 29 - 31. (Canceled).

19. (Previously presented) The plant according to claim 23, further comprising means for transferring the remaining tail gas from the tail gas treatment unit to the means for injecting gas.

23. (Previously presented) A plant for providing gas for down-hole injection for pressure support in an oil reservoir for recovery of hydrocarbons and production of oxygenated hydrocarbons or higher hydrocarbons from natural gas, comprising:

an air separation unit for production of an oxygen-rich fraction for supply to processes that require oxygen and a nitrogen-rich fraction for injection;

a reformer for conversion of a mixture of natural gas, water and oxygen or oxygen-enriched air from the air separation unit into a synthesis gas comprising mainly H_2 , CO, CO_2 and small amounts of methane in addition to any inert gas;

a synthesis unit for conversion of the synthesis gas for synthesis of higher hydrocarbons comprising one or more once-through Fischer-Tropsch units for synthesis of higher hydrocarbons;

means for injecting gas into the reservoir;

means for transferring nitrogen from the air separation unit to the means for injecting gas;

means for transferring at least a part of a waste gas from the synthesis unit to the means for injecting gas; and,

a tail gas treatment unit for removing CO by a shift reaction and separation of hydrogen from the remaining tail gas; and

means for introducing at least a part of the separated hydrogen from the tail gas treatment unit into a Fischer-Tropsch loop to adjust a H_2/CO ratio to a desired level.

28. (Previously presented) The plant according to claim 32, further comprising means for transferring the remaining tail gas from the tail gas treatment unit to the means for injecting gas.

32. (Previously presented) A plant for providing gas for down-hole injection for pressure support in an oil reservoir for recovery of hydrocarbons and production of oxygenated hydrocarbons or higher hydrocarbons from natural gas, comprising:

an air compression unit for production of compressed air for supply to processes that require air;

a reformer for conversion of a mixture of natural gas, water and oxygen or oxygen-enriched air from the air separation unit into a synthesis gas comprising mainly N_2 , H_2 , CO , CO_2 and small amounts of methane;

a synthesis unit for conversion of the synthesis gas for synthesis of higher hydrocarbons comprising one or more once-through Fischer-Tropsch units for synthesis of higher hydrocarbons;

means for injecting gas into the reservoir;

means for transferring nitrogen from the air separation unit to the means for injecting gas;

means for transferring at least a part of the nitrogen-rich waste gas from the synthesis unit to the means for injecting gas; and,

a tail gas treatment unit for removing CO by a shift reaction and separation of hydrogen from the remaining tail gas; and

a means for introducing at least a part of the separated hydrogen from the tail gas treatment unit into a Fischer-Tropsch loop to adjust a H_2/CO ratio to a desired level.

33. (New) The plant according to claim 23, further comprising means for introducing steam into an enhanced oil recovery field for injection into the oil reservoir.

34. (New) The plant according to claim 32, further comprising means for introducing steam into an enhanced oil recovery field for injection into the oil reservoir.